

**BRISTOL INLAND WETLANDS COMMISSION
MINUTES
SPECIAL MEETING OF MONDAY, MAY 9, 2022**

CALL TO ORDER:

By: Chairman Fisk

Time: 7:08 P.M.

Place: BRISTOL CENTRAL HIGH SCHOOL
AUDITORIUM, 480 WOLCOTT STREET**ROLL CALL:**

MEMBERS	NAME:	PRESENT	ABSENT
REGULAR MEMBERS	Zachary Fisk (Chairman)	X	
	Chet Reed (Vice Chairman)		x
	David Rooks (Secretary)	X	
	Michael Robinson	X	
	James Carros	X	
	David Scarritt	X	
	Daniel Massaro, Jr.	X	
ALTERNATE MEMBERS	Carolyn Checoves	X	
	Richard Ministro		X
	James Ritchie	X	
STAFF	Carol Noble, P.E., Environmental Engineer	X	
	Nancy Levesque, P.E., City Engineer		x
	Andrew Armstrong, Assistant City Planner	X	
	Robert Flanagan		x

PLEDGE OF ALLEGIANCE:

Chairman Fisk reminded the Commission the next Regular Meeting of the Inland Wetland Commission is Monday, June 6, 2022. The June Regular meeting will take place at the Board of Education (BOE) Auditorium located at 129 Church Street.

INTRODUCTIONS AND SEATING OF ALTERNATES:

Members and Staff were introduced. Alternate Ritchie was seated in the absence of Reed.

ACCEPTANCE OF MINUTES:

1. IWWC Site Walk Minutes – April 27, 2022 (7 pp, including photos)

MOTION: Move to approve the minutes of the April 27, 2022

By: Robinson

Seconded: Carros

For: Robinson, Carros, Rooks, Fisk, Scarritt, Massaro, & Ritchie.

Against: None.

Abstained: None.

PUBLIC HEARINGS:

1. Application 1975 – Wetlands application for 84 units of elderly housing at 560, 594, 644 Redstone Hill Road; Assessor's Map 1, Lots 9B-1, 9B-2, 11+11-2, +11-3, & 10-B-1; Laurel Meadows, LLC, applicant.
2. Application 1976 – Wetlands boundary change based on soil scientist survey for housing for the elderly (85 units) at 594 & 644 Redstone Hill Road; Assessor's Map 1, Lots 11+11-2+11-3, & 10-B-1; Laurel Meadows, LLC, applicant.

The Commission received the following items in their electronic packets:

Application 1975 packet (92 pp); application form (signed), GIS location and wetland maps; W1 Wetland Delineation Exhibit, dated March 30, 2022, (Cole);, Topographic Survey, dated 9-23-2020 Gary B. LeClair, LLC (sealed); Laurel Meadows Adult Community First Submittal Set, dated March 18, 2022 (Cole), S1, C1-C3, L1, P1-P3, ES1, D1-D3, DB1-DB3, PM1, PH1, S2 (S2 not included); a storm water management report -dated October 12, 2021, entitled "*Stormwater Management Report, 560-644 Redstone Hill Road, Bristol, Connecticut, Prepared for Laurel Crest, LLC, HEC Project #2120, dated October 12, 2021, By Harry E. Cole & Son, 876 South Main Street, Plantsville, CT 06479*"; A letter dated March 30, 2022 (attached map entitled "506-644 Redstone Hill Road Bristol, CT"), from David Lord, C.S.S., E.C. of Soil Resource Consultants, Meriden, to Steve Guidice of Harry E. Cole & Son, Plantsville, regarding Wetland Delineation, 560-644 Redstone Hill Rd; five photographs dated 3-31-2022"

Application 1976 packet (14 pp); application form (signed), GIS location and wetland maps; W1 Wetland Delineation Exhibit, dated March 30, 2022, (Cole);, Topographic Survey, dated 9-23-2020 Gary B. LeClair, LLC (sealed); A letter dated March 30, 2022 (attached map entitled "506-644 Redstone Hill Road Bristol, CT"), from David Lord, C.S.S., E.C. of Soil Resource Consultants, Meriden, to Steve Guidice of Harry E. Cole & Son, Plantsville, regarding Wetland Delineation, 560-644 Redstone Hill Rd; five photographs dated 3-31-2022"

MOTION: Move to open hearing for Application #1975.

By: Robinson

Seconded: Scarritt

For: Robinson, Carros, Rooks, Fisk, Scarritt, Massaro, & Ritchie.

Against: None.

Abstained: None.

The public hearing for Application # 1975 was opened.

MOTION: Move to open hearing for Application #1976.

By: Robinson

Seconded: Scarritt

For: Robinson, Carros, Rooks, Fisk, Scarritt, Massaro, & Ritchie.

Against: None.

Abstained: None.

The public hearing for Application #1976 was opened.

Attorney Timothy Furey, 43 Bellevue Avenue, representing the applicant, introduced the application. He asked if there was anyone on the Commission that had an ethical conflict of interest. He explained that the wetland hearing is limited to wetlands and drainage, not for use, traffic or other zoning or special use permit issues; those issues are in separate venue from this wetland permit public hearing. He introduced David Lord, certified soil scientist, and Brian Panico of H.E. Cole design engineering team, Charlie Talmadge of Development Planning Solutions for layout and Joseph Naples and Kathleen Naples, applicants. He indicated that the survey and wetland boundaries were performed several years ago and David Lord studied the onsite manmade pond, which he will address. Brian will address the stormwater system design and the team is here to answer questions.

David Lord, Professional Soil Science and Environmental Consultant, Soil Resource Consultants, Meriden, described his wetland delineation findings detailed in the March 30th, 2022 report of the June 2020 placement of 25 flags of the on-site wetland along the eastern boundary. He reviewed the on-site soils, including Wilbraham and Menlo glacial till poorly/very poorly drained soils with groundwater at the surface elevation of wetland during the year. He indicated there is clear evidence of grading/excavation and topography changes to the north, east and west and extending south of the pond. Majority of high ground is Cheshire free draining, glacial till, good infiltration soils. Where the site starts to flatten out, Ludlow glacial till soils occur. They are moderately well drained soils (1 step higher than wetland), generally not have water table 24-30" slowly permeable subsoil where water moves horizontally, generally following topography and slowly feeding the wetland at various depths. He reviewed the disturbed areas identified in the report.

Mr. Lord continued to discuss the May 7 report to the Commission, prepared in response to staff comments, regarding the development application. The shallow pool area has a max depth 3-4', and Mr. Lord looked at it as a potential vernal pool in 2020 2021 and 2022 for obligate species that only breed in vernal pools. He found the species pickerel frog and northern spring peepers; these species are facultative, fast gestation that can breed in wetlands limits without requiring the water depth of the pool. He also found green frogs in 2020 only, also a facultative species. He noted that there is a standard recognition of definition of vernal pool to require the use of obligate species (fairy shrimp, spotted salamanders, Jefferson salamanders and other very specific wildlife species). If facultative, there is not recognition of a functioning vernal pool. He was asked if obligate flora are considered in the vernal pool definition and he responded no; physical species such as fish cannot be in it and snapping turtles are considered detrimental; he indicated that there needs to be water that usually extends into June; if it dries up before then, it has to be very specific towards frogs (gestation time). Monitoring usually begins in late March with the migrations to pool for spawning into egg masses, then hatching and tadpole formation. Most of the species' time (of vernal pool species and pools like this) is in the terrestrial areas. He stated it is not a true vernal pool based on no observation of obligate species, but a pool with a breeding population of facultative frogs that he identified. The Spring pool is vernal from seasonal standpoint but not from function. He indicated this pool may not dry up because of the depth and hydrology.

He continued to address the function of the wetland as a classic Palustrine forested wetland; matrix canopy with shrub understory and herbaceous edge. Dominant tree is red maple. Shrub is dogwood, arrowwood, elderberry and spicebush, with significant invasives (multiflora rose) along the edge. Groundcover is heavily influenced by tree canopy, trees limit sun to wetland; the groundcover in the lawn area is much more herbaceous than into the canopy area. No listing on state's natural Diversity database or within 1/2 mile. On-site wetland is a portion

of a larger wetland area to the east and south; function is flood-flow attenuator and irregular surface/shallow ridge lines/bump character provides floodwater detention as seepage water moves generally south/southeast direction. Above the site wetland delineation line, there are places where groundwater hits that hardpan layer and moves over the surface of ground to the wetland edge and onto interior area of wetland. Borings showed highly organic topsoil layer depths in excess of 50 cm (20") is not dominated by redoximorphic layers to the extent to make it classifiable as a wetland. The pockets are natural features of the influx of water because these areas trap water as it comes into the system. Hydrology and water table can be fluctuating, because they are fed by groundwater discharge features. Wetland functions to remove sediments moving into wetland and vegetation for nutrient retention with cleansing effects.

He addressed wetland habitat and stated the wetland is not large enough for forest interior species due to the surrounding residential developments. He said this project will not displace species; the species are already adapted and there should not be a reduction of species diversity or numbers. Groundwater from the detention basins will discharge to the wetland. He was asked about thermal changes due to the impact of the tree canopy adjacent to the wetland and responded that the proposed piped stormwater will mitigate; Thermal effect is caused by 1. large block area of impervious area which changes water temps, and 2. radiation. He believes the site generated stormwater will mitigate it. He was asked about the loss of vegetation close to wetlands. Openness of grass area sunlight penetrates for more herbaceous species, but he does not believe the shrub area is negatively impacted.

He addressed the potential promotion of insects by detention pond creation that these ponds are moving water systems so insect population will not be increased. Catch basin standing water may cause insect breeding but these are conditions on the existing storm drain systems. Dragonfly nymphs are mosquito predators in natural systems.

He was asked how the detention ponds and project will impact the Spring pool? David Lord indicated the Spring pond will still receive groundwater, and the bottom is lower than the groundwater table. Surface water is not being added to the pond. He then was asked to explain why the groundwater would not be present in the detention ponds. The attorney indicated that the engineer will address the detention pond design. Pond locations are used for recharge and ZIRO (zero increase in runoff) downstream. David Lord indicated the proposed pond bottoms are generally at the ground water elevation, and groundwater will still be connected under the berms. Stormwater will be connected to wetland after stormwater treatment. He sees no negative effect, but a positive effect due to treatment in the detention basins and preservation of the wetland.

Attorney Furey indicated that the design team has been working with City on the staff comments.

Brian Panico, P.E., Harry E. Cole & Son, Plantsville reviewed his report, reviewed the calculations and answered questions from the Commission. He indicated the pre-development drainage basin areas have been mimicked in the developed condition, using two detention basins to distribute the drainage to the wetland. He discussed the model and City regulations to meet ZIRO. The water is distributed to the detention basins and slowly metered to the wetland. When ponds fill up, it goes through control structures designed to hold back flow rate to meet ZIRO and still feed wetlands. He indicated that the pond bottoms are designed roughly at groundwater table, with a berm at the low side. That way, the basin cut is minimized. Channels are being considered to avoid short circuiting and orifice size increased to avoid clogging. He stated that there would be no downstream impact. He indicated the downstream system was reviewed briefly and it appears there may be an undersized pipe. He was questioned about the downstream impact. He indicated that based on the model, there will not be a downstream impact. He was questioned about the detention berm holding water back. How will the areas adjacent to the berm be recharged?

In response to Commission questions, David Lord discussed the proposed planting plan for ecological restoration /stabilization and water table fluctuations conditions. Atty. Furey also discussed the stormwater discharges and storm drainage maintenance plan. He also invited further questions.

Staff Member Noble reported that city staff provided comments to the consulting team recently, which are under review. She expressed concern about potential impact to wetland due to the proposed tree clearing along the perimeter length of the delineated wetland edge line, and potential impact due to the proposed berm construction immediately adjacent to the wetland.

Thomas Bentivengo, 5 Village St., provided feedback to Commission after hearing testimony from Attorney Furey, Lord and Panico, re: concerns of water quantity and quality. He indicated there are residents to the east on well water.

Greg Cyr, 812 Redstone Hill Rd., Proposed the question if the Commission is able to hire independent contractors to report on the impact to the wetlands.

Christopher Stone, 389 Village St., indicated concerns about the pond water level (dry vs at water level), environmental impacts to the wetland of pollutants and salts impacting the wetland ecology and no clear topographical picture of where water is going.

Atty. Furey indicated that the design team is reviewing and working on staff posed questions about the water levels in ponds, especially as the ponds are excavated into the bank; and that the ponds are designed to empty within 24 hours of an event, and remove pollutants. They are also reviewing treatment train potential in LID considerations. He explained the landowners' history and design considerations. He requested a continuation of the meeting to continue to work with staff to address questions.

Chairman discussed the next meeting date and venue. At Board of Education venue, the Zoom capability is available.

Due to the potential impact of the proposed tree clearing along the perimeter length of the delineated wetland edge line, and potential impact of the proposed berm construction immediately adjacent to the wetland, Noble recommended the Commission seek a third party evaluation. Noble gave possible options for the Commission's consideration. The 3rd party consultant options were discussed.

Additional discussion of the proposed impervious area and pond design ensued.

Peter Blauvelt, Donna Lane, made public comment about his observations of storm drainage discharges.

Commission discussed renewing Conservation District membership and a 3rd party review.

MOTION: Commission motioned to pursue renewal of Connecticut Conservation District membership.

By: Robinson

Seconded: Carros

For: Robinson, Carros, Rooks, Fisk, Scarritt, Massaro, Ritchie.

Against: None.

Abstained: None.

MOTION: Commission motioned to pursue third party site evaluation from Connecticut Conservation District.

By: Robinson

Seconded: Carros

For: Robinson, Carros, Rooks, Fisk, Scarritt, Massaro, Ritchie.

Against: None.

Abstained: None.

MOTION: Commission motioned to table application 1975 and continue the hearing to the next scheduled meeting.

By: Robinson

Seconded: Carros

For: Robinson, Carros, Rooks, Fisk, Scarritt, Massaro, Ritchie.

Against: None.

Abstained: None.

MOTION: Commission motioned to table application 1976 and continue the hearing to the next scheduled meeting.

By: Robinson

Seconded: Carros

By: Robinson

Seconded: Carros

For: Robinson, Carros, Rooks, Fisk, Scarritt, Massaro, Ritchie.

Against: None.

Abstained: None.

ADJOURNMENT:

MOTION: Move to adjourn at 9:25 P.M.

By: Robinson

Seconded: Carros

For: Scarritt, Robinson, Carros, Massaro, Reed, Rooks and Fisk.

Against: None.

Abstained: None.

This meeting was taped.

Respectfully submitted,
Aubrey Lee Minkler

Zachary Fisk, Chairman
Inland Wetlands Commission

David Rooks, Secretary